

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
29 April 2004 (29.04.2004)

PCT

(10) International Publication Number
WO 2004/035571 A1

(51) International Patent Classification⁷: **C07D 409/12**,
401/12, 407/12, 417/12, 209/08, A61K 31/404

(74) Agent: GREENFIELD, Michael, S.; McDonnell
Boehnen Hulbert & Berghoff, Suite 3200, 300 South
Wacker Drive, Chicago, IL 60606 (US).

(21) International Application Number:
PCT/US2003/032947

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 15 October 2003 (15.10.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/419,012 15 October 2002 (15.10.2002) US

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): RIGEL
PHARMACEUTICALS, INC. [US/US]; 240 East Grand
Avenue, South San Francisco, CA 94080 (US).

Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv)) for US only*

(72) Inventors; and

Published:

— *with international search report*

— *before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments*

(75) Inventors/Applicants (*for US only*): SINGH, Rajinder
[GB/US]; 1832 Hillman Avenue, Belmont, CA 94002
(US). DARWISH, Ihab, S. [US/US]; 609B N. Claremont
Street, San Mateo, CA 94401 (US). KOLLURI, Rao S. S.
[IN/US]; 1200 East Hillsdale Blvd.#216, Foster City, CA
94404 (US). THOTA, Sambalah [IN/US]; 1059 Foster
City Blvd., Apt. B, Foster City, CA 94404 (US). LU,
Henry, H. [US/US]; 1031 Flying Fish Street, Foster City,
CA 94404 (US).

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*



WO 2004/035571 A1

(54) Title: SUBSTITUTED INDOLES AND THEIR USE AS HCV INHIBITORS

(57) **Abstract:** The present invention comprises indole-derivatives that are inhibitors of HCV. Composition comprising the com-
pounds in combination with a pharmaceutically acceptable carrier are also disclosed, as are methods of using the compounds and
compositions to inhibit HCV infection of a cell, particular in the form of treating HCV infection in a mammal.